

What is claimed is:

1. A fusion-promoting prosthetic device for insertion into an intervertebral space, comprising a sagittally-extending plate having caudal and cephalad edges, the caudal edge being adapted for complete insertion within a first vertebral body and the cephalad edge being adapted for complete insertion within a second vertebral body adjacent to the first vertebral body, a first transverse plate connected to the sagittally-extending plate, and a second transverse plate connected to the sagittally-extending plate, the first and second transverse plates being adapted for complete insertion within the intervertebral space.

2. The prosthetic device of claim 1 wherein the first transverse plate comprises a bearing surface, the bearing surface being adapted to engage the first vertebral body.

3. The prosthetic device of claim 1 wherein the second transverse plate comprises a bearing surface, the bearing surface being adapted to engage the second vertebral body.

4. The prosthetic device of claim 1 wherein the sagittally-extending plate further comprises a plurality of openings extending therethrough.

5. The prosthetic device of claim 1 wherein each of the first and second transverse plates comprises a plurality of openings extending therethrough.

6. The prosthetic device of claim 1 wherein the sagittally-extending plate is coated with a bone-growth promoting substance.

7. The prosthetic device of claim 1 wherein the first and second transverse plates are each coated with a bone-growth promoting substance.

8. The prosthetic device of claim 1 wherein the first transverse plate is angled relative to the sagittally-extending plate.

9. The prosthetic device of claim 8 wherein the second transverse plate is angled relative to the sagittally-extending plate, the angulation of the first and second transverse plates corresponding to an angular relationship defined between the first and second vertebral bodies.

10. The prosthetic device of claim 1 wherein the first and second transverse plates each extend at a substantially right angle to the sagittally-extending plate.

11. The prosthetic device of claim 1 wherein the caudal edge is beveled at a posterior portion thereof.

12. The prosthetic device of claim 1 wherein the cephalad edge is beveled at a posterior portion thereof.

13. A fusion-promoting, spinal plating assembly, comprising a first plate adapted to engage a first vertebral body and a second vertebral body, and at least one additional plate connected to the first plate, the at least one additional plate extending transversely to the first plate, wherein the at least one additional plate is adapted to be inserted within an intervertebral space.

14. The plating assembly of claim 13 wherein the at least one additional plate is integrally formed with the first plate.

15. The plating assembly of claim 13 wherein the at least one additional plate is removably connected to the first plate.

16. The plating assembly of claim 13 wherein the at least one additional plate extends at an angle relative to the first plate.

17. The plating assembly of claim 13 wherein the first plate is adapted to be impacted into each of the first and second vertebral bodies.

18. The plating assembly of claim 13 wherein the first plate is adapted to be inserted into a preformed opening in each of the first and second vertebral bodies.

19. A method for promoting fusion in an intervertebral space defined between first and second vertebral bodies, comprising:

providing a prosthetic device having a first plate adapted to engage each of the first and second vertebral bodies, and a pair of additional plates connected to the first plate, the additional pair of plates extending in a direction transverse to the first plate; and

inserting the prosthetic device into the intervertebral space such that a first edge of the first plate is completely inserted within the first vertebral body, a second edge of the first plate is completely inserted within the second vertebral body, and each of the additional pair of plates are completely disposed within the intervertebral space.

20. The method of claim 19 further comprising inserting bone grafts into the intervertebral space.

21. The method of claim 19 wherein inserting the prosthetic device comprises impacting the first and second edges of the first plate into the first and second vertebral bodies, respectively.

22. The method of claim 19 wherein inserting the prosthetic device comprises forming openings in each of the first and second vertebral bodies and inserting the first and second edges of the first plate into the preformed openings of the first and second vertebral bodies, respectively.